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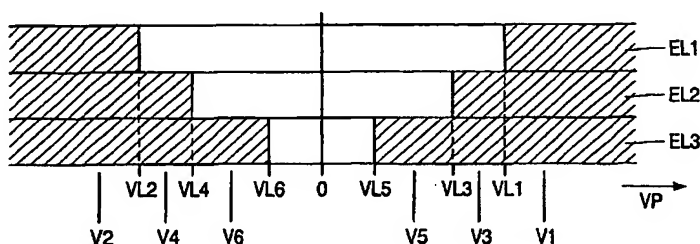
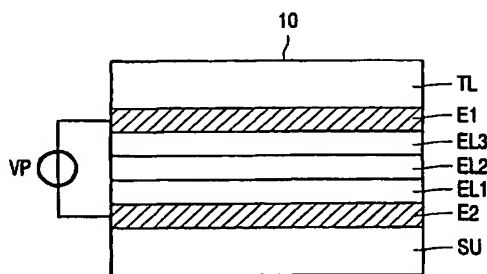
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[Continued on next page]

(54) Title: ELECTROCHROMIC COLOR DISPLAY HAVING DIFFERENT ELECTROCHROMIC MATERIALS



(57) Abstract: An electrochromic display comprises electrochromic pixels (10) which comprise at least a first electrochromic material (EL1) and a second electrochromic material (EL2) between two electrodes (E1, E2). Each of the electrochromic materials (EL1, EL2) has two stable states, in one state at a first voltage across the electrochromic pixel (10) the material is transparent, in the other state at a second voltage across the electrochromic pixel (10) the material absorbs a color and thus is colored. The material changes from the one state to the other state by applying the appropriate one of the first or the second voltage. The amount of change of the absorption of the color depends on the time the appropriate voltage is applied. The first electrochromic material (EL1) changes from a transparent state to a color absorbing state for at least partly absorbing a first color when a pixel voltage (VP) across the electrochromic pixel has the first value (V1). The first electrochromic material (EL1) changes from the color absorbing state to the transparent state when the pixel voltage (VP) has a second value (V2) which has a polarity opposite to the first value (V1). The second electrochromic material (EL2) changes from a transparent state to

a color absorbing state for at least partly absorbing a second color different than the first color when the pixel voltage (VP) has a third value (V3) which has an absolute value smaller than an absolute value of the first value (V1). The second electrochromic material (EL2) changes from the color absorbing state to the transparent state when the pixel voltage (VP) has a fourth value (V4) which has a polarity opposite to the third value (V3). An absolute value of the fourth value (V4) is smaller than an absolute value of the second value (V2).



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TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

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B. FIELDS SEARCHED

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

COMPENDEX, EPO-Internal, INSPEC, PAJ, IBM-TDB, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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X	US 4 135 790 A (TAKAHASHI YOUSKE ET AL) 23 January 1979 (1979-01-23)	1,2,5-7
Y	column 3, line 22 - column 4, line 60	2-4
A	figures 3-5	8-14
X	EP 0 470 867 A (DONNELLY CORP) 12 February 1992 (1992-02-12)	1,2
Y	page 7, line 14 - line 40	4
A	figures 1-3,8-11	3,5-14
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Y	figures 1-3	4
A	column 6, line 15 - line 38; figures 1-3	3,5-14
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A	the whole document	1-3,5-14
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A	abstract; figures 1-9	1-3,5-14
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